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| EXAMINER | |
|---|---|
| TRAN, KHUONG N | |
| **ART UNIT** | **PAPER NUMBER** |
| 2609 | |

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/785,571 | LEE ET AL. | |
| | Examiner | Art Unit | |
| | Khuong Tran | 2609 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *24 February 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-11* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *24 February 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

### *Specification*

1. The disclosure is objected to because of the following informalities: regarding paragraph [0009] line 1, the word 'advice' is a typographical error, it should be changed to –device--.

Appropriate correction is required.

### *Claim Objections*

2. Claims 1, 5, and 8 are objected to because of the following informalities: Regarding claims 1, 5, and 8, the phrases "can" and "can be" on page 9, line 14, page 10, lines 2 and 6, and page 11, lines 7, 14, and 19 render the claims indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 3-5, and 10-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Chun et al (US Pub No. 2003/0226149).

Regarding claim 1, Chun et al discloses of an integrated home network system that consists of all the elements as claimed. First, the media processor **[figure 1, 108]** is used for receiving media signal. Even though the first Media Access Control layer is not explicitly mentioned in the teaching, it is inherent to one with ordinary skill in the art to recognize the Optical Line Termination unit **116** coupled to the media processor **108** in **figure 1** has a MAC layer to handle the data transmissions between the media sources and the end-user devices. An asynchronous transfer mode (ATM) switch device **114** having at least 3 nodes is coupled to the OLT and the media processor. Referring to **figure 2**, a second MAC layer and a Physical layer, which are a part of the microprocessor unit **228 [paragraph 0034, lines 15-17]** of the integrated terminal device **200**, is further illustrated with a wireless transmitter **204** coupled to them. According to **figure 1**, the ATM switch component **114** is connected to the HDTV source processor **108**, the Video On Demand (VOD) server **110**, the remote access server (RAS) **112**, and the optical line terminal (OLT) **116** to provide communication between the corresponding integrated terminal device **200** and the RAS **112** in response to the Internet access of the corresponding integrated terminal device **200 [paragraph 0030, page 4, lines 6-10]**. Therefore, with the features and the components disclosed from the teaching above, the switch can be configured to couple and link up the components according to the claim herein.

Regarding claim 3, Chun et al indicates in **figure 2** that the wireless transmitter is a wireless local area network (WLAN) transmitter **204**.

Regarding claim 4, Chun et al states in **figure 1** that the multiple node switch device **114** is an ATM, hence a programmable switch.

Regarding claim 5, Chun et al disclose a media processor **108**, a first MAC layer that is inherently included in the Optical Line Terminal **116** coupled to the processor, a switch device **114** coupled to the first MAC layer as illustrated in **figure 1**. Furthermore, there are a second MAC layer and a physical layer of the microprocessor **228** **[paragraph 0034, lines 15-17]** residing in the terminal device **200,** which is coupled to the switch, which in turn, coupled to the external network **106** in **figure 1**. A wireless transmitter **204** is shown in **figure 2** that's coupled to the second MAC layer in the microprocessor **228**. An asynchronous transfer mode (ATM) switch device **114** having at least 3 nodes is coupled to the OLT and the media processor. Referring to **figure 2**, a second MAC layer and a Physical layer, which are a part of the microprocessor unit **228** **[paragraph 0034, lines 15-17]** of the integrated terminal device **200**, is further illustrated with a wireless transmitter **204** coupled to them. According to **figure 1**, the ATM switch component **114** is connected to the HDTV source processor **108**, the Video On Demand (VOD) server **110**, the remote access server (RAS) **112**, and the optical line terminal (OLT) **116** to provide communication between the corresponding integrated terminal device **200** and the RAS **112** in response to the Internet access of the corresponding integrated terminal device **200 [paragraph 0030, page 4, lines 6-10]**. Therefore, with the features and the components disclosed from the teaching above, the

switch can be configured accordingly to the claim herein to perform the various functions of a wireless LAN access point, a wireless media sharing device, or a media server.

Regarding claim 10, Chun et al indicates in **figure 2** that the wireless transmitter is a wireless local area network (WLAN) transmitter **204**.

Regarding claim 11, Chun et al states in **figure 1** that the multiple node switch device **114** is an ATM, hence a programmable switch.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 2 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chun et al, and further in view of Kelton et al (US Pub No. 2004/0125779).

Regarding claims 2 and 9, Chun et al disclose the capability of the system to process the different sources of media such as audio, video, as well as high definition television (HDTV) signals **[paragraph 0014, lines 31-35]**. Chun et al, however, fail to incorporate frequency modulation (FM) signal as a feature of the invention. Kelton et al teach the different implementations of protocol for data communication systems within a network by means of amplitude, frequency modulations and so forth **[paragraph 0003, lines 9-20]**. Since both references teach methods for broadcasting multimedia signals

from a source to the client devices over a computer network using the Internet protocol, it would have been obvious to one with ordinary skill in the art at the time of the invention to include Frequency Modulation (FM) signal as part of the media sources to achieve the predictable results of transmitting audio data from a broadcasting source.

7. Claim 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chun et al (US Pub No. 2003/0226149).

Regarding claims 6-8, as previously stated in claims 1 and 5, Chun et al. disclose a programmable ATM switch in **figure 1** that serves as a connection bridge for data transmission between the integrated terminal device **200**, and the multimedia and external Internet sources **106**. Depending on the request of the end-user device, the switch configures so that the data is retrieved from the correct source and broadcasted to the user devices such as PC, home appliances, and HDTV **[figure 1]**. Chun et al do not explicitly teach which MAC layer is connected to which MAC layer or Physical layer to transmit data packets or media signals. However, official notice is taken that using appropriate layers to transmit data packets or media signals are well known and expected in the communication art. Therefore it would have been obvious to one with ordinary skill in the art at the time of the invention to modify the switch as taught by Chun et al to couple the various components in order to achieve predictable results of transmitting media data to the right components in a particular switching status.

***Conclusion***

8. Any response to this Office Action should be **faxed** to (571) 273-8300 or **mailed** to:

Commissioner for Patents,
P.O. Box 1450
Alexandria, VA 22313-1450

**Hand-Delivered responses should be brought to**
Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khuong Tran, whose telephone number is (571) 270-3522. The examiner can normally be reached Mon-Fri from 7:30AM - 5:00PM.

10. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Benny Q. Tieu, can be reached at (571) 272-7490. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published application may be obtained from either Private PAIR or Public PAIR. Status information for unpublished application is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have question on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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AU 2609

August 14, 2007

BENNY Q. TIEU
SPE/ TRAINER